Before the Federal Communications Commission

Washington, DC 20554

In the Matter of:

International Comparison and Consumer)	GN Docket No. 09-47
Survey Requirements in the Broadband Data	a)	
Improvement Act)	
)	
A National Broadband Plan for Our Future)	GN Docket No. 09-51
)	
Inquiry Concerning the Deployment of)	GN Docket No. 09-137
Advanced Telecommunications Capability t	(0)	
All Americans in a Reasonable and Timely)	
Fashion, and Possible Steps to Accelerate)	
Such Deployment Pursuant to Section 706)	
of the Telecommunications Act of 1996, as)	
Amended by the Broadband Data)	
Improvement Act)	
)	

COMMENTS OF THE AMERICAN LIBRARY ASSOCIATION IN RESPONSE TO NBP PUBLIC NOTICE # 16

The American Library Association (ALA), the world's oldest and largest professional library association, is pleased to provide comments on this Public Notice seeking comments related to broadband adoption including measuring broadband adoption, the societal cost of non-adopters, and identifying and remedying barriers to adoption.

There are currently 16,543 public library outlets in communities across the nation. Libraries are found in virtually every community in the United States. ¹ These libraries play a vital role in their communities in supporting workforce development, small business creation, education from the early years through higher and continuing education, and access to government resources through public access computer terminals. Nearly one hundred percent of libraries are able to

¹ Henderson, E., et al. (2009). *Public Libraries Survey: Fiscal Year 2007* (IMLS-2009–PLS-02). Institute of Museum and Library Services. Washington, DC. Available: http://harvester.census.gov/imls/pubs/Publications/fy2007 pls report.pdf.

provide their patrons with broadband access to this wealth of resources.² The ability of public libraries to reach a large proportion of the nation's population is commensurate with the goals of the National Broadband Plan (NBP) of maximizing the utilization of broadband infrastructure and service and increasing individual adoption rates.

These comments seek to demonstrate the unique position of the library as an institution whose mission it is to serve the information needs of the community and in so doing, enable individual broadband adoption. In regards to information literacy, including digital literacy, the library and library staff have a keen understanding of the information needs particular to each community and within the community are familiar with the demographics of the various populations that have access to the library.³ The public library has a long tradition of tailoring its services to meet these needs as well as adopting new services and technologies that improve patrons' access to and ability to use the library's resources. As we continue to develop as an information society, libraries are proving they are truly innovative by incorporating purposeful uses of the Internet to develop critical services—basic computer and Internet skills training, employment and continuing education preparation, and small business and entrepreneurial resources —for their patrons. Libraries recognize that to be able to fully engage in and contribute to civic society, every individual must have access to the Internet via a broadband connection and the skills necessary to utilize its resources.

1. Measuring broadband adoption

As the Commission develops the NBP, it is challenged to determine the most effective means to measure broadband adoption rates. As stated in the Public Notice, the United States has an overall home adoption rate of 63% of adults.⁴ Home adoption, however, varies widely. For families with an income under \$25,000 home adoption is about 25% and among Black households adoption rate is 45% and among Hispanics 43%. Those out of work have a home adoption rate of 56%.⁵ These data beg the question whether relying solely on home adoption is in fact the most robust means of measuring broadband adoption. Depending on home use effectively labels a significant swath of the population as non adopters or in the very least does not acknowledge how these people may access the Internet in a third space. For the 71% of the

 ² Davis, et al. (2009). Libraries Connect Communities 3: Public Library Funding & Technology Access Study. Chicago: American Library Association. ("Libraries Connect Communities 3"). Available: http://ala.org/ala/research/initiatives/plftas/2008_2009/index.cfm.
 ³ The term "digital literacy" describes a subset of the larger concept of "information literacy."

The term "digital literacy" describes a subset of the larger concept of "information literacy." Information literacy encompasses a full range of capabilities required to successfully navigate analog as well as Internet resources. The public library plays an increasingly integral role in ensuring the digital literacy of adult and youth populations. For the 35% of U.S. households that report they have no Internet access, the public library represents an absolutely essential link to connect users to the information they need. Library staffs serve as a critical link in closing the digital divide in vulnerable adult populations by providing both formal and informal (often at point of need) information literacy and technology training.

⁴ Pew Internet & American Life Project, Home Broadband Adoption 2009, at 3-4 (2009). Available: http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf
⁵ Ibid.

population whose only access to no-fee Internet is at the public library, it is crucial to examine the library's role in creating relevant content and providing a culture of adoption that guides those who do not yet or are not necessarily ever likely to use the Internet at home to successfully access the information resources available online.

Broadband adoption happens beyond the home

Access to broadband alone does not constitute adoption. There are three factors that must be present to ensure adoption: 1) ease of use, 2) individual comfort with technology, and 3) an ability to find, utilize, and, increasingly, create relevant content. The implicit goal of the NBP is not to have the infrastructure in place to provide access to the Internet, but rather to ensure that every individual can benefit from the resources made available by that infrastructure. Studies have shown that it is not having a computer at home, or the ability to have one, that makes someone go online.⁶ There needs to be a culture of adoption through which an individual can internalize the personal and societal benefit to going online. Subscribership is one measure, but it does not necessarily reflect purposeful use of broadband as the term "adoption" implies.

ALA respectfully suggests there are two components to adoption and therefore a single measurement cannot be used. Adoption can mean *use* and it can mean *subscribership*. In some cases, the desirable outcomes will be achieved by increased subscribership in the home. In others, adoption (subscribership) will only happen after a certain comfort level and understanding is achieved. For reluctant users, the library provides a supportive environment and access to resources with which patrons can begin to explore the wealth of online resources and understand how the Internet can be a beneficial addition to daily life. It therefore remains critical that adoption (use) continue to be supported through sufficient broadband connections in locations such as libraries where support and training are available. Additionally, in some situations, home adoption (subscribership) may not happen. In those cases, where this country's digital divide will remain a factor, adoption (use) at the library remains a critical component of any community's health and ability to prosper. The library may be the only place where those individuals who do not subscribe at home will access the Internet. For these reasons, ALA suggests that the Commission consider that "adoption" should be viewed in terms of desired outcomes recognizing that household adoption rates alone are not a true measure of use.

ALA maintains that for those individuals who have not yet adopted broadband at home and for those whose Internet connection is inadequate for some applications, the public library is the logical third space where patrons can realize the benefits of going online. People who are seeking information do not always seek it in the same format. The library provides access to online resources, but at the same time offers a suite of services that complement those available

-

⁶ Pew Internet & American Life Project, Home Broadband Adoption 2009, at 3-4 (2009). Available: http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf and Strover, Sharon, Chapman, Gary, Waters, Jody. "Beyond Community Networking and CTCs: Access, Development, and Public Policy." *Telecommunications Policy* 28, no. 7/8 (2004): 465-85.

via broadband. ALA looks forward to the fruition of the NBP when robust and scalable broadband is deployed at affordable rates thus supporting the library's critical role in supporting the information literacy, including digital literacy, of its patrons.

In such a setting, patrons can receive technological support at the point of need and are more likely to find the information they seek be it educational content, a job application, federal assistance forms, or an email from a family member serving in the military overseas. In Oklahoma, for example, a mother whose son was recently deployed in Iraq came to the library to set up an email account and visited regularly to correspond with her son. Sadly, her son was killed. After his death she came to the library to read the online condolences posted to the funeral home website. Access to a computer is one thing, but finding relevancy in going online is another. Purposeful use of available broadband is not dependent on place, but on ability to find and use content that has personal benefit.

Measuring broadband adoption depends on many variables

ALA recognizes the need to ascertain to what extent people are incorporating broadband into their daily lives and what benefit it brings them and their communities. In an effort to measure adoption rates, the Commission should take into account that individual uses will be influenced by numerous variables. It is unlikely that applications would be standard across all segments of the population. Current use studies show application and frequency of online activity varies according to age, income, education level, and ethnic group. Accessibility issues for the visually impaired, deaf and hard of hearing, and other differently abled populations further underscores the difficulty in applying standards to how and why people use broadband. Finally, applications change frequently and their relevancy fluctuate. Depending on a moving target to measure broadband adoption poses numerous questions about the accuracy and reliability of the prospective data.

Benchmarks should reflect purposeful uses of broadband

The current means of measuring adoption rates solely on home penetration is an ostensibly flat measure. Data reflect the number of subscribers but do not show what they are doing when they go online. If the goal in adoption is to ensure individuals improve their quality of life by increasing educational, economic, and/or social opportunities, the Commission should seek creative yet accurate measures to determine the increased usage of broadband enabled applications. It will continue to be a challenge to establish benchmarks that describe individual and/or demographic online activities. Rather than apply potentially arbitrary weights to online activities, the public would be better served if the Commission sought opportunities to link

⁷ Oklahoma Department of Libraries LSTA Five Year Evaluation, 2003-2007.

⁸ Pew Internet & American Life Project, Home Broadband Adoption 2009, at 3-4 (2009). Available: http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf

increased civic participation or increased successful applications for government services, for example, with a community's ability to access and use broadband applications.

2. Cost of digital exclusion

Libraries are reporting increased use, especially by patrons coming in to use the public access Internet terminals. As more and more essential services are available only online, the costs of digital exclusion to individuals and to the larger society will be exacerbated. Libraries are experiencing first-hand the impact of federal and state programs switching to online applications for services, employers requiring resumes sent via email, and more students taking online courses to fit around work schedules. Regarding government services provided online, 81% of libraries report they offer as needed assistance with government forms and more than half provide specific help in accessing E-government services. About one quarter of libraries report they staff one specialist in E-government resources. Broadband today, including high capacity solutions that scale to the multi-user environment of the library, is not the luxury it might have been a few short years ago. Today it should be considered a necessary part of the communications infrastructure to which all people need access to live full and productive lives.

Costs for non adopters will likely increase

Quantifying the personal costs faced by non-adopters is an elusive target. However:

- 54% of Americans who sent a letter to the editor, contacted a government official, or signed a petition did so online;¹⁰
- Unemployment figures have reached 10.2% nationwide with twenty nine states and the District of Columbia reporting an increase in October; ¹¹
- Fewer than 44% of leading employers accept in-store applications and; 12
- 62% of those currently employed use the Internet as part of work. 13

It is possible to extrapolate from these data that the negative consequences of not being able to access online resources will become more profound and the digital divide among vulnerable populations is likely to intensify.

⁹ U.S. Public Libraries and E-Government Services. (2009). Available: http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/IssuesBrief-Egov.pdf

¹⁰ Pew Internet & American Life Project, Home Broadband Adoption 2009, at 3-4 (2009). Available: http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf

¹¹Bureau of Labor Statistics http://stats.bls.gov/

¹² Job Seeking in Public Libraries (2009). Available:

http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/JobBrief2009 2F.pdf

¹³ Pew Internet & American Life Project, Home Broadband Adoption 2009, at 3-4 (2009). Available: http://www.pewinternet.org/~/media//Files/Reports/2009/Home-Broadband-Adoption-2009.pdf

Broadband is required for many critical applications

The Commission asks which costs depend on broadband technology and home access. ALA notes that as websites, including government websites, become more bandwidth intensive simply to load, it is safe to conclude that successful participation in these and other programs requires a broadband connection. For example, many Departments of Motor Vehicles require people to download Portable Document Format (pdf) forms; Departments of Family Services require an interactive questionnaire to determine service eligibility; and job certification programs include flash and other multimedia software. All of these websites depend on broadband to be used. In a multi-user environment, like the library, what should constitute the definition of broadband differs greatly from a setting where only one user accesses an application or website at a time. The bandwidth required to run complex applications simultaneously is significantly more intensive as well as more difficult to predict. In order for libraries to provide adequate broadband for their patrons to be able to access information without suffering from web pages not loading or applications timing out, libraries must be afforded access to robust broadband that can scale as demand fluctuates and likely continues to increase.

Adoption does not solely depend on home access

ALA contends that for those populations who are either non adopters or those lacking information literacy skills, having the additional suite of services available in the public library will lead to greater success in their online experiences. 54% of libraries report providing assistance to patrons with online government forms and 80% report providing assistance with *understanding* these resources.

Digital exclusion negatively impacts democratic government

In framing the costs to society at large when significant segments of the population do not have the necessary skills or the understanding of the immediate relevancy of going online, ALA points to the missed opportunities suffered by these non adopters.

Beyond individual digital exclusion in relationship to educational and economic opportunity, non adoption precludes full civic engagement as the trend toward a participatory government continues. Beyond personal benefit, a democracy depends on participation from the electorate in order to function as it was intended. ALA has long held the belief that access to all forms of information ensures a well informed population. Today, access to information includes access to online resources.

Regardless of other categories identified as key societal costs and benefits, ALA contends that ensuring the public have the information literacy skills, including digital literacy, necessary for full civic participation should drive remaining categories under consideration.

3. <u>Barriers to adoption</u>

Personal relevancy is key to broadband adoption

Personal relevancy and utility of broadband technology and online content and insufficient digital and technical literacy levels are two of the most pressing barriers to adoption identified by the Commission. As previously stated, having access to a computer and the Internet does not guarantee that an individual will be able to use it effectively. Without an understanding of what kinds of resources and information are available online, an individual who has had little prior exposure to the Internet, or is technologically timid, may have significant concerns about actual or perceived risks of going online.

ALA sees one critical role of the library as supporting those reluctant adopters in finding relevant Internet content and helping them develop the skills with which to apply it. Often an individual comes to the library with a specific purpose—filing for unemployment, for example—and with point of use support offered by more than half of public libraries, a reluctant user is more likely to be successful in her or his endeavor. Successfully setting up an email account, completing a job application, opening a jpg file of a grandchild's artwork, or live chatting with a family member stationed overseas makes broadband immediately and personally relevant. The successful completion of any one of these purposeful uses is often the motivating factor to continued use of broadband. Adoption is sustainable when users find content that has positive impact on their lives and have the confidence and skills to make productive use of it.

In further assigning any priority to addressing adoption barriers, ALA suggests the Commission take into account the scope and impact of both formal and informal support mechanisms available via community institutions like the public library. Such mechanisms are often the means through which to ensure broadband is truly accessible.

4. Overcoming barriers to adoption

Affordable broadband solutions should not be at the expense of current programs

ALA takes this opportunity to suggest that while it is laudable to seek solutions to the often unaffordable cost of broadband subscriptions, it is important to consider the implications of adding eligible services or extending program scope within existing programs. Straying from the original intent of a program without considering the impact on current beneficiaries of that program may lead to unintended negative consequences to the scope and outcomes of the original program. Shifting or otherwise repurposing funds from the Lifeline or Link Up programs without plans to account for additional program costs is not a sustainable solution.

Diluting the original purposes of these programs could likely lead to misinterpretations. Additionally, the broader the scope of the program, the more opportunity for unintentional program abuses as the original intent becomes more vague.

Digital literacy skills are critical in today's information society

ALA commends the Commission for recognizing the importance of developing technology skills as a crucial component to successful use of digital resources. As the Commission itself has noted through numerous workshops and Public Notices on the development of the NBP, (e.g., FCC workshops on Opportunities for Individuals with Disabilities and Diversity and Civil Rights Issues in Broadband Deployment and Adoption) there is a significant variety of ways people engage with digital content. Any debate on establishing digital literacy curriculum standards should acknowledge learning differences between individual learners as well as within populations that face multiple challenges in learning. ALA respectfully suggests the Commission consult with a variety of learning experts including K-12 education associations and the American Association of School Librarians (AASL) going forward.

ALA recognizes that standards allow for benchmarking improvements and data collection. Implementing national curriculum standards in education and training programs has in the past put undue burden on the schools and agencies that carry out the programs. As the Commission considers the most effective means to ensure an information literate society, it should review previous national education programs especially as related to enforcing and reporting progress from the local level.

At the same time, it is important to acknowledge the work that is currently in progress in assuring that our nation's students leave school with the technology skills they will need to successfully enter a highly competitive job market. AASL assembled *Standards for the 21*st *Century Learner*. ¹⁴ These standards address information literacy as a suite of skills, including digital literacy, that ensures students adopt critical thinking skills and are able to apply them in meaningful and productive ways when they leave school.

The library is a place where people learn to find relevancy in going online

The library offers a supportive environment for those hesitant or otherwise challenged to use digital resources thus fostering the necessary culture of adoption. Libraries report patrons often use their public access terminals for a specific reason that serves as enough motivation to overcome any misgivings about going online. Many seniors, for example, are prompted to learn how to use the Internet as a way to keep in contact with their children and grandchildren as families spread out in different communities. With point of need assistance in how to use the computer and navigate the Internet, reluctant adopters find the support they need to go online.

¹⁴ American Association of School Librarians, http://www.ala.org/ala/mgrps/divs/aasl/index.cfm.

The public library is a trusted community resource that has a keen understanding of the demographics of its community.

As the Commission debates how to reach the segments of the population who remain offline, ALA can point to the role libraries played in the recent DTV transition as community partners and training host facilities. ¹⁵ In addition to experience working with a variety of agencies, libraries are often the community exemplar of creating locally relevant content (e.g., providing access to genealogy, employment resource databases, and website links to local federal assistance agencies). Libraries do not limit who can participate in their formal training programs or access their resources. In fact, they actively encourage participation from all strata of their communities. The success of any outreach endeavor depends on finding a community institution with a trusted reputation through which to partner in developing community appropriate activities and then stage the program. As the Commission rightly points out, non adoption is in large part due to lack of understanding of the immediate and long term personal benefits of being able to access online resources. Outreach will be most effective if the messages are made meaningful to local populations. The combination of knowing local demographics, ability to partner with a variety of organizations, and a track record of providing information resources the community needs makes libraries a keystone to success in outreach programs.

5). <u>Learning from existing programs</u>

The library plays a critical role in information and digital literacy training

As the Commission considers the role of the federal government in engaging people who lack adequate comfort and skills in using technology, ALA is pleased the Commission plans to review programs where technology training is already occurring.

As noted previously, public libraries across the nation are formalizing the training they have offered their patrons since the introduction of public access computers as a standard library resource. About half of urban libraries and libraries in high poverty communities report they consider offering formal training in computer and Internet skills as a critical library service.¹⁶

Public libraries are responding proactively to meet the ever changing technology needs of their patrons. 91% of libraries overall and 97% of libraries serving a high poverty area report offering formal training classes in general computer skills (e.g., mouse skills, keyboarding, and printing documents). 70% offer formal training using various software applications (e.g., word processing, spreadsheets, and presentation production) and 93% have formal classes in general Internet use (e.g., email setup and web browsing). Libraries are also going beyond formal classes and providing patrons with access to peripheral technologies through which they can start

¹⁵ ALA, APTS and PBS Discuss DTV Transition Partnership, http://www.wo.ala.org/districtdispatch/?p=485.

¹⁶ Davis, et al. (2009). *Libraries Connect Communities 3: Public Library Funding & Technology Access Study*. Chicago: American Library Association. ("Libraries Connect Communities 3"). Available: http://ala.org/ala/research/initiatives/plftas/2008 2009/index.cfm.

to apply their newly acquired competencies. Libraries allow patrons to store and access content via USB storage devices, connect and manipulate digital cameras, and burn CDs and DVDs. This rich array of technology related applications gives patrons the opportunity to strengthen their basic technology skills in personally relevant applications. Programs that combine theory with purposeful uses of the curriculum are likely to produce users who are more confident and willing to try new technologies as they become available. Users will also be able to cross apply the skills they learn in formal settings to the more informal situations where they are likely to need the skills.

ALA commends the Commission for soliciting input from the public and community institutions as it assembles the National Broadband Plan.

Thank you for considering these comments.

Respectfully submitted,

Emily Sheketoff Executive Director ALA Washington Office